

AMENDMENTS TO THE CLAIMS

The following is a complete list of all claims in this application.

1. (Currently Amended) A driving module for applying a driving signal to a display cell circuit formed on a transparent substrate, the driving module comprising:
 - a flexible board;
 - a driving circuit mounted on the flexible board;
 - a driving signal line group which is in electrical communication with the driving circuit and the display cell circuit so as to input/output the driving; and
 - inspecting patterns formed on the driving signal line group ~~for inspecting states to inspect~~ the condition of the driving signal line group and the driving signal,-
 - wherein the driving signal line group comprises a plurality of driving signal input lines which are formed on the flexible board to provide the driving signal to the driving circuit; a plurality of driving signal bypass lines which are formed on the flexible board to provide the driving signal supplied from the driving circuit to a next driving circuit; and a plurality of driving signal output lines which are connected to the driving circuit to provide the driving signal supplied from the driving circuit to the display cell circuit,
 - wherein the inspecting patterns include a first inspecting pattern formed at the driving signal input line, and a second inspecting pattern formed at the driving signal bypass line, such that the first inspecting pattern is not electrically connected to the second pattern.
2. (Currently Amended) The driving module ~~as claimed in~~ of claim 1, wherein the driving signal line group is formed on the flexible board disposed at a side of the transparent substrate.
3. (Currently Amended) The driving module ~~as claimed in~~ of claim 1, wherein the driving circuit is a gate driving circuit, and the driving signal is a gate driving signal which is applied from the gate driving circuit to a gate of the display cell circuit.

4. (Currently Amended) The driving module as ~~claimed in~~of claim 3, wherein the ~~driving signal line group comprises:~~

a plurality of gate driving signal input lines, ~~which are formed on the flexible board to provide the gate driving signal to the gate driving circuit;~~

a plurality of gate ~~the~~ driving signal bypass lines ~~which are formed on the flexible board and provide the gate driving signal supplied from the gate driving circuit to a next driving circuit; and~~

a plurality of gate ~~the~~ driving signal output lines are gate driving signal input lines, gate driving signal bypass lines, and gate driving signal output lines, respectively. ~~which are connected between the gate driving circuit and the signal transmission lines to provide the gate driving signal supplied from the gate driving circuit to the signal transmission lines.~~

5. (Currently Amended) The driving module as ~~claimed in~~of claim 4~~1~~, wherein each of the plurality of gate driving signal input lines is correspondingly connected to each of the plurality of gate driving signal bypass lines in the gate driving circuit.

6. (Currently Amended) The driving module as ~~claimed in~~of claim 5, wherein the inspecting patterns are formed at the plurality of gate driving signal input lines.

7. (Cancelled)

8. (Currently Amended) The driving module as ~~claimed in~~of claim 3~~4~~, wherein each of the inspecting patterns ~~has a width that is larger~~is wider than ~~a width of~~ each gate driving signal input line and gate driving signal bypass line.

9. (Currently Amended) A liquid crystal display device, comprising:
a liquid crystal display panel having gate lines and data lines and display cell circuits which are connected to the data lines and gate lines respectively, the liquid crystal display panel displaying an image in response to first and second driving signals inputted through the data lines and the gate lines;

an integrated printed circuit board that generates the first and second driving signals;
a plurality of first driving modules which are electrically connected between the integrated printed circuit board and the data lines so as to transmit the first driving signal to the data lines; and
a plurality of second driving modules having a plurality of driving signal line groups that are electrically connected to the gate lines, the second driving modules are electrically connected to the integrated printed circuit board through ~~signal transmission~~ the gate lines formed on the liquid crystal display panel, and the second driving modules transmitting the second driving signal to the gate lines;

wherein each of the second driving module comprises a flexible board; a gate driving circuit mounted on the flexible board; a plurality of driving signal line groups in electrical communication with the gate driving circuit and the display cell circuit so as to input/output the gate driving signal; and inspecting patterns formed on the plurality of driving signal line groups for inspecting the condition of the plurality of driving signal line groups and the driving signal.

wherein the inspecting patterns include a first inspecting pattern formed at first driving signal lines of the driving signal line groups, and a second inspecting pattern formed at second driving signal lines of the driving signal line groups, such that the first inspecting pattern is not electrically connected to the second inspecting pattern.

10. (Currently Amended) The liquid crystal display device ~~as claimed in~~ claim 9, wherein the plurality of driving signal line groups are formed on the flexible board disposed at a side of the liquid crystal display panel.

11. (Currently Amended) The liquid crystal display device ~~as claimed in~~ claim 9, wherein the first and second driving signals are data and gate driving signals, respectively, and the first and second driving modules are data and gate driving modules, respectively.

12. (Cancelled)

13. (Currently Amended) The liquid crystal display device ~~as claimed in~~ claim 12, wherein ~~the plurality of~~ each of the driving signal line groups comprises:

a plurality of gate driving signal input lines which are formed on the flexible board and provide the gate driving signal to the gate driving circuit;

a plurality of gate driving signal bypass lines which are formed on the flexible board and provide the gate driving signal supplied from the gate driving circuit to a next gate driving circuit; and

a plurality of gate driving signal output line which are connected between the gate driving circuit and the gate lines so as to provide the gate driving signal supplied from the gate driving circuit to the gate lines.

14. (Currently Amended) The liquid crystal display device ~~as claimed in~~ of claim 13, wherein each of the plurality of gate driving signal input lines is correspondingly connected to each of the plurality of gate driving signal bypass lines in the gate driving circuit.

15. (Currently Amended) The liquid crystal display device ~~as claimed of~~ of claim 14, wherein the inspecting patterns are formed at the plurality of gate driving signal input lines.

16. (Cancelled)

17. (Currently Amended) The liquid crystal display device ~~as claimed in~~ of claim ~~16~~ 13, wherein the each of the inspecting patterns ~~has a width that is larger~~ is wider ~~than a width of each~~ gate driving signal input line and gate driving signal bypass line.

18. (Previously Cancelled)

19. (Previously Cancelled)

20. (Currently Amended) A display apparatus, comprising:

a transistor substrate;

an integrated printed circuit board arranged adjacent to the transistor substrate;

a first driving module having a first end and a second end, the first end connected to the integrated printed circuit board and the second end connected to the transistor substrate, wherein the first driving module includes a plurality of signal transmission lines; and

a second driving module having a first end and a second end, the first end connected to the transistor substrate, ~~whenever~~ where the driving module comprises a plurality of input signal lines in electrical communication with the plurality of signal transmission lines, and a plurality of signal bypass lines which are formed on the flexible board to provide the driving signal supplied from the second driving module to a third driving module have a first end and a second end, the first end connected to the transistor substrate, and a portion of the plurality of input signal lines and signal bypass lines includes an inspecting patterns to allow for an inspection of an electrical signal in the plurality of input signal lines.

21. (New) A driving module applying a driving signal to a display cell circuit formed on a transparent substrate, the driving module comprising:

a flexible board;

a driving circuit mounted on the flexible board;

a driving signal line group which is in electrical communication with the driving circuit and the display cell circuit so as to input/output the driving signal; and

inspecting patterns formed on the driving signal line group to inspect the driving signal line group and the driving signal,

wherein the inspecting patterns include a first inspecting pattern formed at first driving signal lines of the driving signal line group, and a second inspecting pattern formed at second

driving signal lines of the driving signal line group, such that the first inspecting pattern is not electrically connected to the second inspecting pattern.

22. (New) The driving module of claim 21, wherein the driving signal line group is formed on the flexible board disposed at a side of the transparent substrate.

23. (New) The driving module of claim 21, wherein the driving circuit is a gate driving circuit, and the driving signal is a gate driving signal which is applied from the gate driving circuit to a gate of the display cell circuit.

24. (New) The driving module of claim 21, wherein the driving signal line group comprises:

a plurality of driving signal input lines which are formed on the flexible board to provide the driving signal to the driving circuit;

a plurality of driving signal bypass lines which are formed on the flexible board to provide the driving signal supplied from the driving circuit to a next driving circuit; and

a plurality of driving signals output lines which are connected to the driving circuit to provide the driving signal supplied from the driving circuit to the display cell circuit.

25. (New) The driving module of claim 22, wherein the first and second driving signal lines are the driving signal input lines and the driving signal bypass lines, respectively.